

### **REMARKS**

In response to the Office Action, Applicant has amended claims 1 and 11, has canceled claim 8 and has presented new claims 16-21. Claim 7 was previously canceled. Claim 8 was canceled because the subject matter thereof is incorporated into amended claim 1. The claims remaining for consideration are therefore claims 1-6 and 9-21.

**The Examiner objected to claim 11 because the phrase “the planetary gear mechanism” lacks antecedent basis.** In response, Applicant has changed the dependency of the claim from claim 9 to claim 10. Applicant submits that claim 10 provides antecedent basis for the phrase and that, consequently, this objection has been addressed and overcome.

**The Examiner rejected claims 1, 2, 6, 8-10 and 13-15 under 35 U.S.C. 102(b) as being anticipated by Donaldson et al. (hereinafter Donaldson),** As indicated previously, claim 8 has been canceled and therefore the rejection of the same is moot.

In response to this rejection, Applicant has amended claim 1 to include the limitations that each of the braking elements has a first end and a second end; and the first end is pivotally mounted to said brake spinner frame and a spring element extends between the brake spinner frame and a region of the braking element proximate the first end thereof, and the first end of each of said braking elements is biased into contact with a braking surface and the second end thereof is spaced a distance from the braking surface when the braking mechanism is in a rest position; and said braking element

pivots from the rest position into a braking position under the influence of centrifugal force as an output shaft rotates to thereby bring the braking element progressively into contact with the braking surface.

The Examiner stated on page 3 of the action that the Applicant's previous arguments had been considered but were not persuasive. Specifically, the Examiner stated that he disagreed with the Applicant's argument that Donaldson does not provide increased braking force through progressive contact with the braking surface by pivotal movement of the braking element. In support of his position, the Examiner stated that Donaldson's braking mechanism has braking elements 47, 52 pivotally attached at 51 to a centrifugal force mechanism 49, 19, 23, thus providing a braking force just as Applicant's device.

Applicant respectfully disagrees with the Examiner's position. Applicant concurs that Donaldson has braking elements that are pivotally attached at 51 to a rigid rod 49. Applicant submits, however, that Donaldson's braking elements are not brought progressively into contact with the braking surface. Applicant submits that the braking elements are already entirely in contact with the braking surface. Applicant submits that this full contact is shown in Fig. 3 and 4 of the patent and is described in column 5, lines 27-34 where it is stated:

*"The lining 42 of the brake shoes is pressed into engagement with the brake drum 43 at all times by the spring 54 which is attached on a first end 55 to the first brake shoe 47 and on a second end 56 to the second brake shoe 48. The spring 54 is preferably a spring wire member comprising one and one-half loops of spring wire, the first and second ends 55 and 56 of which are biased outwardly. "*

*(Emphasis added by Applicant)*

It should be noted that the spring 54 attaches to the brake shoes 47 and 48 at the end of the brake shoe opposite to the end that pivotally attaches to the rod 49. Consequently, the spring 54 ensures that the entire brake shoe lining 52, between the pivot pin 51 and the spring connection, is in abutting contact with the brake drum 53.

This is also the case with the second embodiment of Donaldson's invention described in column 5, lines 35-43.

*"As shown in Fig. 4, a modified brake system may be provided where a link 58 is provided between the support rod 49 and each of the first and second brake shoes 47 and 48. The link 58 is connected to the rod 49 by a first pivot pin 59 and to one of the brake shoes by a second pivot pin 60. In this arrangement, full contact of the lining 52 with the brake drum 53 is assured which increases the frictional force between the lining 52 and the brake drum 53."*

*(Emphasis added by Applicant)*

Applicant therefore respectfully submits that Donaldson's brake shoe liner cannot be progressively brought into contact with the brake drum by the operation of centrifugal force as it is already in full contact with the same.

Applicant's device differs from this arrangement disclosed by Donaldson. In Applicant's device, the first end 90 of each braking element 80 is pivotally mounted at 82 to the brake spinner frame 76 and the spring element 88 extends between the brake spinner frame 76 and a region of the braking element 80 proximate the first end 90. The second end 86 of the braking element 80 is spaced a distance away from the brake drum 28. Thus, when the escape device is not in use and is in a rest position, the first end 90 of the braking element 80 is in contact with the braking surface 28 but the second end 86 of the braking element is not. This arrangement is illustrated in Fig. 19 and described in the specification on page 10, lines 3-5. This means that the second

end 86 of the braking element is free to move toward and away from the brake drum 28 as it moves between a rest position and a braking position. When the brake is applied, the first end (90) which is already in contact with the brake drum 28, bites into the braking surface and as the centrifugal forces increase, more and more of the liner 84 on the braking element 80 between the first end 90 and the second end 86 is brought into contact with the brake drum 28. In other words, the braking element is progressively brought into contact with the braking surface. Eventually, all of the liner 84 on the braking element 80 between the first end 90 and the second end 86 will be brought into contact with the brake drum 28. This progressive engagement ensures a smoother, less jerky braking experience for the user of the escape device. The progressive engagement also aids in preventing the brakes from suddenly binding.

Applicant therefore respectfully submits that claim 1 is not anticipated by Donaldson in that each and every limitation of this claim is not disclosed in this reference arranged as in the claim. In Re ***Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.***, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added)

“Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim*.”

Applicant therefore submits that claim 1 is allowable over Donaldson. Claims 2, 6, 8-10 and 13-15 all depend from claim 1. Consequently, if claim 1 is found to be allowable, claims 2, 6, 9, 10 and 13-15 should also all be allowable as being dependent upon an allowable base claim.

Applicant also has the following comments regarding some of the other claims rejected for anticipation by Donaldson.

**Claim 10** includes the limitation that the cable dispensing assembly includes a reel from which said cable is dispensed, said reel having an innermost surface which serves as a ring gear of a planetary gear mechanism. Applicant respectfully submits that in Donaldson's device the spool 20 does not have an innermost surface which serves as a ring gear of a planetary gear mechanism. In column 5, lines 45-46, Donaldson states:

*"As shown in Figs. 2 and 5, the planetary gear system 23 includes an internal ring gear 63 that is fastened to the second end plate 39."*

(Emphasis added by Applicant)

Applicant respectfully submits that it is clear from this statement and from Fig. 2 of Donaldson, that the innermost surface of the spool from which the cable is dispensed is not serving as the ring gear for the planetary gear mechanism. Applicant contends that Claim 10 is therefore not anticipated by Donaldson as each and every limitation of the claim is not disclosed in the reference arranged as in the claim.

**Claim 14 and 15.** Applicant respectfully disagrees with the Examiner that Donaldson discloses the limitations of these claims. Donaldson merely states that his device may be attached to a building 12 by means of a cable 13 (column 4, lines 36, 37. There is no disclosure of a retractable launch arm with a channel member having a track therein. Applicant therefore respectfully submits that these claims distinguish over this reference.

Applicant submits that in light of the amendments to claim 1 and the above arguments, none of claims 1, 2, 6, 9, 10 and 13-15 are anticipated by Donaldson and these claims should therefore be allowed.

**The Examiner rejected claims 3 and 4 under 35 U.S.C. 103(a) as being unpatentable over Donaldson et al in view of Giardini.** The Examiner stated that Donaldson shows the claimed device with the exception of the leaf members and that

Giardini at 31 shows leaf members. In response. Applicant submits that Giardini does not disclose a braking mechanism where the brake shoes are progressively pivoted into contact with a brake drum. Applicant therefore submits that the combination of Donaldson and Giardini does not disclose the invention claimed in claim 1. Consequently, inasmuch as claims 3 and 4 depend from claim 1, if claim 1 is found allowable then claims 3 and 4 will also be allowable as being dependent from an allowable base claim.

**The Examiner rejected claims 11 and 12 under 35 U.S.C. 103(a) as being unpatentable over Donaldson in view of Kikuchi.**

The Examiner stated that Donaldson shows the claimed device with the exception of the three outermost planetary gears and that Kikuchi shows three outermost planetary gears. Applicant submits, however, that Kikuchi does not disclose a braking mechanism where the brake shoes are progressively pivoted into contact with a brake drum. Applicant therefore submits that the combination of Donaldson and Kikuchi does not disclose the invention claimed in claim 1. Claims 11 and 12 depend from claim 1 and, consequently, if claim 1 is found allowable, then claims 11 and 12 will also be allowable as being dependent from an allowable base claim.

**Applicant has submitted new claims 16-22.**

**Claim 16** includes the limitation that the escape device has a back plate and is adapted to be worn on the back of a user. Furthermore, the claim includes the limitation that the planetary gear mechanism is disposed within the housing between the braking mechanism and the cable dispensing mechanism. The claim further includes a limitation similar to that included in amended claim 1 disclosing that the braking elements have a

first and second end where a spring element biases the first end of the braking element into contact with a braking surface while the second end thereof is spaced a distance from the braking surface when the device is at rest and is progressively brought into contact with that surface when the device is used. Applicant respectfully submits that none of the cited art discloses the back plate or the arrangement of the braking mechanism, cable dispensing mechanism and gear arrangement as arranged in this claim. The particular arrangement of the components results in a compactly designed device that is easily worn on the back of an escaping person. The compact device will not project for a great distance outwardly away from the back of the escaping individual where it could accidentally strike objects projecting outwardly from the side of the building. Applicant submits that this claim is neither anticipated by nor obvious in view of any of the cited art.

**Claim 17** includes the limitation that the back plate is contoured to fit the human back. None of the prior art devices include such a back plate. Donaldson and Kikuchi disclose strap arrangements that embrace the body or can be held on to by the escaping person. **Claims 18 and 19** include the limitations of the device having a cable guide that extends upwardly and outwardly from the perimeter wall of the housing and includes a channel through which the cable is dispensed; and a plurality of cooling leafs that extend outwardly from the perimeter wall of the housing, respectively. If claim 16 is found allowable, then these two claims will also be allowable as being dependent from an allowable base claim.

**Claims 20 and 21** are directed to a combination of the cable dispensing assembly of claim 1 and a launch arm that extends outwardly from a building and to the attachment

between the two. Applicant submits that the cable assembly is not anticipated nor obvious in light of the cited art as argued herein and that the combination is therefore not anticipated nor obvious in light of these references.

Applicant believes all of the claims remaining in this application are in condition for allowance. Applicant therefore respectfully requests consideration of the claims and the arguments for patentability presented herein.

Should the Examiner wish to discuss any matters raised in this response, he is invited to contact the undersigned at (330) 244-1174.

Respectfully submitted at Canton, Ohio this 2<sup>nd</sup> day of OCTOBER, 2009.

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